Express

Design Google smart jacket with Levi's

If 3D printed artificial muscles appear, are robots distant with high imitation?

The emergence of bionic smart film, have "tireless" movement characteristics.

The first baking CPET sot film packaging in the world, you don't have to open the package before it enters the oven.

Theme of Current Issue

Introduction of Gift Box Liner

Creative Life

Can't you fall asleep? Would you like a kind of wallpaper that can tell stories?

Introduction of Gift Box Liner

ZRP 中荣印刷 PRINTING & PACKAGING

ZRP @Printing Brief 印刷资讯

Design Google smart jacket with Levi's

Google designed a kind of smart jacket with Levi's, and the price of it was 350 dollars. Users can play/pause music, navigate, view text messages and they can also achieve other functions by sliding or tapping the cuffs of a jacket and doing other operations. On the cuffs of a jacket, a gesture sensor is embedded into a flexible tag and they share wireless connection with mobile devices through micro-electronics, and this tag can be a warning by means of touch or light. This jacket is made of denim fabrics and it can be washed freely after you remove your cuff label, and it is compatible with Android and iOS platform.

At present, the product has been sold in stores such as Kinfolk store in Brooklyn, New York, Fred Segal department store in West Hollywood and Concepts retail store in Boston.

If 3D printed artificial muscles appear, are robots distant with high imitation?

To make artificial muscles capable of high strain capacity and adaptability, researchers used silica matrix as synthetic materials so that ethanol disperses in micro-bubbles. This solution combines the characteristics of large flexibility and strong plasticity of other materials, and at the same time, it has lower manufacturing cost and it is made from environmental friendly materials. The strain energy of new artificial muscles (the energy stored in bodies during deformation) is 15 times larger than the normal muscle and the weight as heavy as 1,000 times of its own weight can be lifted.

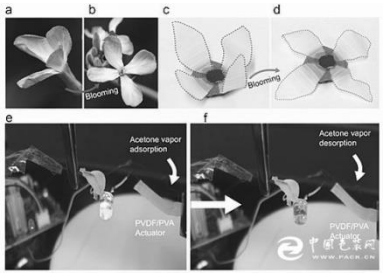
After the required shape is made with a 3D printer, artificial muscles need to connect with thin-film resistor wire, which is started at low power. Through being controlled with a computer, individual components can perform almost all designed movement tasks.

In the long run, they also plan to control muscle movement with AI, which is an important step forward for robots to imitate human movements and lays a foundation for the arrival of highly anthropomorphic robots.

The emergence of bionic smart film, have "tireless" movement characteristics.

After petal-shaped double films absorb acetone molecules, petals are dan cing like a radish flower swinging in wind. "This is a bionic deformation of double films of polyvinylidene fluoride/ polyving akohol. Du Xuemin, an as sociate researcher of Shenzhen Institutes of Advanced Technology,Chines e Academy of Sciences, told "Chinese Science News" reporters something. Recently, the research group of Zhang Lidong, a doctoral supervisor of Col lege of Chemistry, East China Normal University, cooperates with the rese arch group of Du Xuemin, and they regard polymer materials of PVDF and PVA as the subjects in the study, and through simulating biological structu re derivation law, a new kind of intelligent flexible double-layer polymer membrane material is prepared.

The bionic deformation of double films of PVDF / PVA. The thin film has the last ing movement, and if electricity can be generated by using the characteristic of lasting movement, the application of th e relevant technologies can be greatly e xpanded in self-generation wearable an d implantable electronic devices; howe ver, the wearable and implantable indu stry has the market scale of more than 100,000,000,000.



The first baking CPET sot film packaging in the world, you don't have to open the package before it enters the oven.

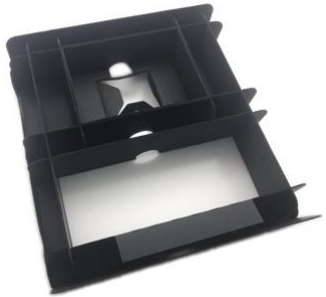
Faerch Plast has launched the first baking CPET soft film packagin g in the world. The latest innovation allows consumers to place t heir products directly in ovens or microwave ovens without rem oving the current packaging or contacting raw food, and it can pr ovide significant health benefits.

According to the introduction of the general manager in Faerch P last--

The baking soft film packaging is really changed, and with the sp ecial SkinCook top internet packaging from Bemis Flexible Packag ing, it means that the packaging can't be opened in any way, and it can be cooked directly from the refrigeration or frozen state.

"The packaging also attracts consumers' attraction and increases the efficiency of shelf space, and it provides a maximum protecti on for products during transportation and in shops. For conventi onal ovens, cooking time has been reduced by 20%, and for micr owave ovens, cooking time has been reduced by 40%, and what' s more, ugly gravy will not be generated. In addition, the shelf lif e of products has been improved greatly, which is conducive to r educing food waste."

Paper lined gift boxes



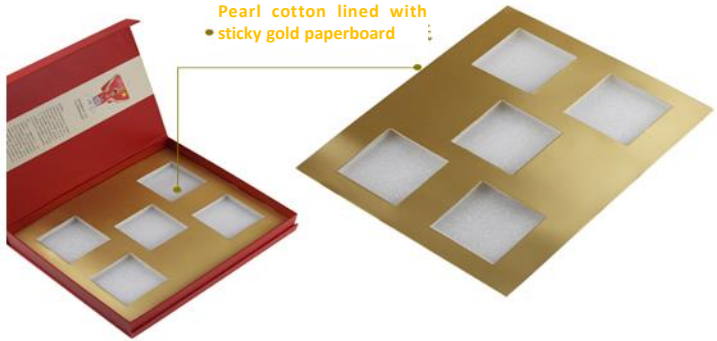
Black cards framed by tunnel paper

Specialty paper/ivory board (the above picture has colorful paper)

Greyish white paper + silk textiles

Taking cardboard or corrugated paper as the lined gift boxes: because having low cost and convenient processing, cardboard or corrugated paper is used by people, and it is suitable to use the objects whose shapes are square/round/cylindrical, for example, commonly used moon cake boxes and optical disk boxes use cardboard and corrugated paper.

Pearl cotton lining



Pearl cotton (PEP) lining consists of low density polyvinyl ester which produces numerous independent bubbles after physical foaming. Have the following characteristics, such as water proof, moisture proof, shock proof, sound insulation, sound insulation, good plasticity, good toughness, recycling and environmental protection. Pearl cotton looks wavy and it also seems that a lot of bubbles are sticking together and have light weight.

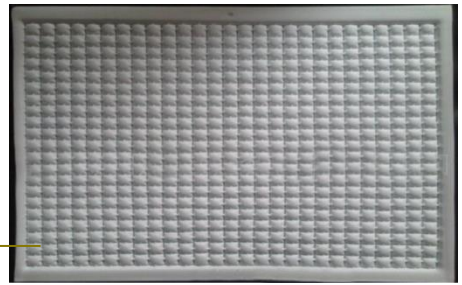
Bubbles (benzene board)

Bubbles (benzene board), bubble is a kind of commonly used low-end lining, and it has good shock proof, but it is fragile. It is suitable for boxes with a high shockproof requirement, such as glassware, wine packaging and glass packaging;

EVA lining

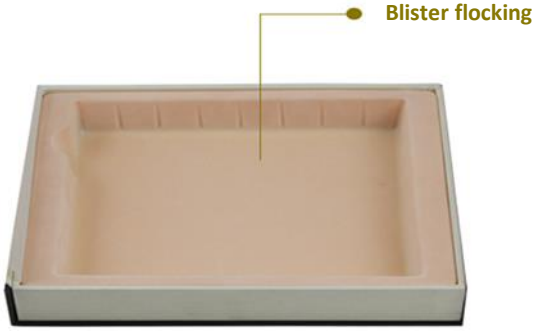
EVA lining flannelette

Freely combined EVA foam lining (small grids should be pulled out according to the content size)



EVA can be used as lined gift boxes, and EVA is a kind of polyethylene foam product with dense texture and 2 colors of white and black. Because EVA has different contents, there is a big difference in processing, and EVA is more beautiful than the appearance of PE. EVA can be directly used to make all kinds of modeling. In general, high-end cosmetics and electronic products will use it.

Blister



Thick PS blister

Blister (PVC, PET, PP, PS, PET-G)

PVC: the most commonly used blister materials have soft hardness, good toughness and good plasticity, and these materials can be made into transparent and various colors. Transparent PVC is used to pack electrons, cosmetics, toys and other products.

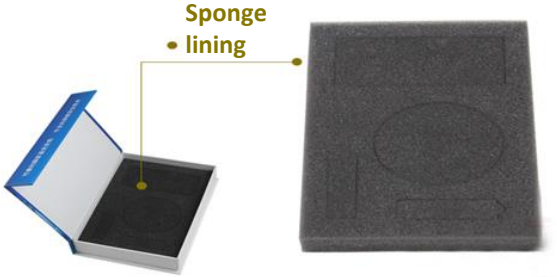
PET: soft hardness, good toughness, high strength, bright surface, environmental protection and innocuity. The price is also more expensive than PVC, and the material is often required by customers to replace PVC with high-end and environmentally friendly products.

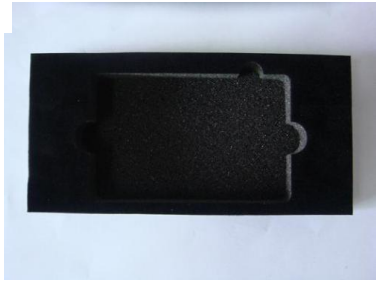
PS: small density (light weight), environmental protection and innocuity, good plasticity, poor toughness, fragility, transparent materials can't be made of it, so it can only be made of bottom support blister.

PP: soft materials, good toughness, environmental protection, innocuity and thermostability, it is often packaged as tableware or other high temperature resistant products; Poor plasticity, difficult processing and poor surface glossiness, PET-G (GAG):

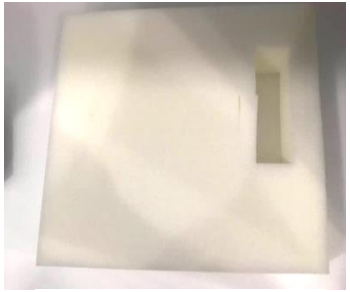
PET-G（GAG): soft hardness, good toughness, high strength. Environmental protection, high frequency heat seal can be used. However, the cost is high.

Sponge





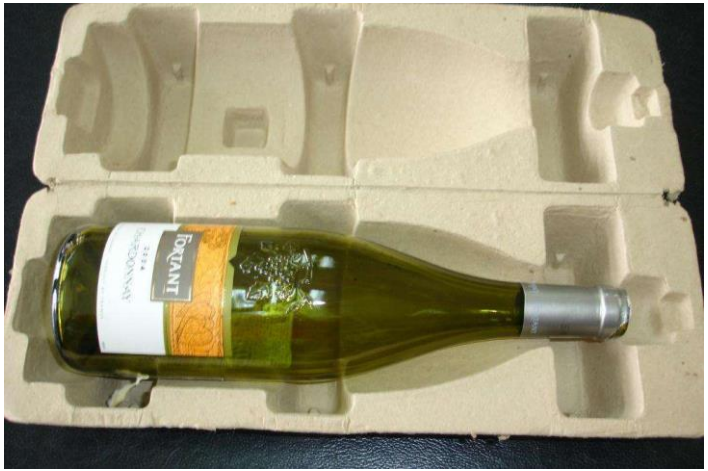
Sponge stick implant flannelette



Free combination sponge

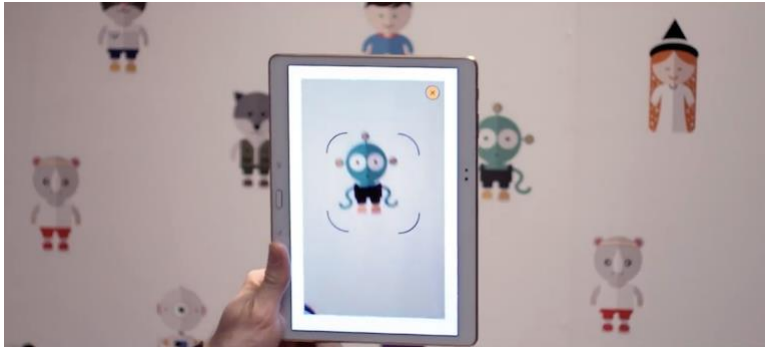
Sponge products have the following characteristics, including heat preservation, heat insulation, sound absorption, cushion, shock absorption, dust prevention, seal airtight, inflaming retarding, electrostatic prevention, electric conduction, excellent permeability and rich elasticity. According to different demands, it can be divided into ordinary sponge (the density is from 15 to 150), hard sponge (medium-hardness sponge, high-hardness sponge and various-hardness sponge), high resilience sponge, ultra-soft sponge and mould foaming mould.

Molded pulp

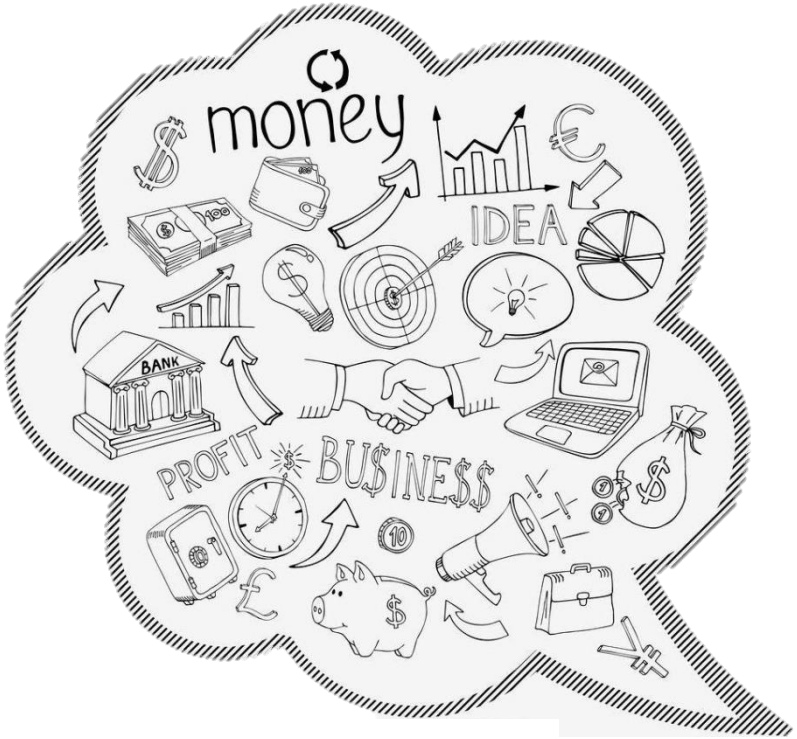


Through taking vegetable fiber pulp or waste paper that can be recycled completely as the basic material, **molded pulp products** are a kind of pollution-free scientific and technological green environment protecting products with the unique technology and these products are widely used in food (medicine) containing, electrical equipment packaging, seedlings growing, medical utensil, handicraft base and fragile article padding and packaging.

Can't you fall asleep? Would you like a kind of wallpaper that can tell stories?



A France home-improvement store Castorama which devotes it to create a better life controls the quality of products, and what's more, it pursues the perfect user experience, and they have introduced a kind of "Magic Wallpaper" that can tells stories. The magic of the wallpaper lies in these cartoon characters on the wallpaper, and each of them has the digital recognition function. Users only need to download the same APP, and they can scan a cartoon character by using the scanning function in the APP, and after the system identification, the interesting story of this character will be released. In addition to single character stories, each character can combine with another character, and then a new story is generated. It is amazing, and unpredictable combinations not only can inspire children's imagination and expand their thoughts, but also can satisfy children's curiosity, so that they can enter more interesting story kingdom. Every night, you can read a wonderful story, and I feel warm when I think of it.



Founded in 1978, ZRP is **a comprehensive printing & packaging solution provider** focusing on the design, production and service of paper printing and packaging related products.

We believe that to grasp the information and pay close attention to innovation can create value! We hope to create an exchange platform of mutual learning and common progress with customers through printing information reports, information sharing, **focus on innovation, and enhance the service value!**

For more information, welcome to visit our website: http://www.zrp.com.cn or contact Mr. Tan Ronghong of our group research and development

Tel：+86-0760-85286777
E-mail：jack.tan@zrp.com.cn ;
market@zrp.com.cn